NOTES ON BLUE-GREEN ALGAL TYPE SPECIMENS

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Several Type specimens, hitherto misinterpreted in the literature, came to my attention when I visited European herbaria during the summer of 1970. The trip through Europe was supported in major part by grants from the American Philosophical Society and the National Science Foundation. Mr. Richard W. Hildebrand made this typescript.

Chlorogloeopsidaceae Mitra, Ann. No. Nat. Acad. Sci. India 1965: 124. 1967. --Type genus: Chlorogloeopsis Mitra, loc. cit. 1967. --Type species: Chlorogloea Fritschii Mitra, Ann. of Bot., N. S. 14(56): 460. 1950. Nostoc Fritschii Schwabe & El Ayouty, N. Hedwigia 10(3--4): 533. 1966. Chlorogloeopsis Fritschii Mitra, Ann. No. Nat. Acad. Sci. India 1965: 124. 1967. --I studied microscopically a slide of the original culture (the Type) from Allahabad soils at the British Museum (Natural History). The plants therein preserved are distinctly of a species of Nostoc, with heterocysts present; the presence or absence of accompanying Fungi was not determined = Nostoc muscorum Ag. A. B. Gupta in Revue Algologique, N. S. 10(2): 115--117 (1971), in judging the literature cited above, has expressed an opinion that the plants referred to here are of N. commune Vauch.

Fischera tenuis Martens (as "Fischeria") [in Kurz, Proc. Asiatic Soc. Bengal 1870: 259. 1870] ex Bornet & Flahault, Ann. Sci. Nat. VII. Bot. 5: 67. 1887. Stigonema tenue Bornet & Flahault [Mém. Soc. Nat. Sci. Nat. & Math. Cherbourg 25: 210. 1885] ex Bornet & Flahault, Ann. Sci. Nat. VII. Bot. 5: 67. 1887. Fischerella tenuis Forti, Syll. Myxophyc., p. 576. 1907. --No specimen of this was seen by Bornet & Flahault in the preparation of their "Révision des Nostocacées hétérocystées" (1887); they transcribed Martens' description verbatim. The Type specimen (a duplicate of which is in the British Museum), from damp walls of the northern faces of buildings, Botanic Gardens, Calcutta, Jan. 1870, S. Kurz no. 2687 in the Rijksherbarium, Leiden = Trentepohlia lagenifera (Hildebr.) Wille, in excellent condition and virtually free of parasitization by fungi.

Hapalosiphon tenuissimus Grunow [in Rabenhorst, Fl. Eur. Algar. 2: 284. 1865] ex Collins, Holden & Setchell, Phyc. Bor.-Amer. 5: 212. 1896. H. fontinalis var. tenuissimus Collins in Collins, Holden & Setchell, loc. cit. 1896. H. fontinalis fa. tenuissimus Collins & Setchell ex Elenkin, Monogr. Alg. Cyanoph., Pars Spec. 1: 508. 1938. --H. tenuissimus Grun. was not referred to in Bornet & Flahault's "Révision" (1887). Its Type specimen, "Auf Lemna minor in Pfützen . . . bei Kuffstein",

Tyrol, Heufler, 24 Sept. 1860, in the Natural History Museum, Vienna = hyphae of Fungi.

Hyphomorpha Borzi, Studi sulle Mixoficee, p. 68, 82. 1916. --Type species: H. antillarum Borzi, ibid. p. 82. 1916. H. antillana Borzi pro synon., loc. cit. 1916. --Madame Dr. S. Jovet-Ast made available to me several specimens of Trichocolea tomentosa Gottsche from Martinique and Guadeloupe in Husnot's Plantes des Antilles no. 219 (1868), in the Muséum National d'Histoire Naturelle in Paris. In one of these specimens, designated here as the Type, along with some Scytonema Hofmannii Ag., filaments of Hyphomorpha antillarum as described by Borzi are represented sparsely = young Stigonema panniforme (Ag.) Harv.

Rosaria Carter in Compton, Journ. Linn. Soc. Bot. 46: 54. 1922. Nelliecarteria J. de Toni, Noter. di Nomencl. Algol. 8: [5]. 1936. --Type species: Rosaria ramosa Carter, loc. cit. 1922. Nelliecarteria ramosa J. de Toni, loc. cit. 1936. --At the British Museum (Natural History) in 1950 I examined the Type slide, R. H. Compton no. 1181 from New Caledonia, noting that this plant is not a member of the coccoid Myxophyceae; I ascribed it to the Fungi because of its general resemblance to hyphae of Monilia spp. The material had been mounted in liquid containing glycerine, which had subsequently dried, so that a precise assessment of the nature of the plant could not be made. During my 1970 visit I made holes in the sealing compound and ran water under the cover slip on this slide. I discovered that the plant described by Carter as Rosaria ramosa is a member of the Trentepohliaceae = Physolinum Monilia (De Wildem.) Printz.

Mastigocoleopsis Geitler, Beih. z. Bot. Centralbl. 41(2): 258. 1925. --Type species: Mastigocoleus obtusus Carter, Journ. Linn. Soc. Bot. 46: 54. 1922. Mastigocoleopsis obtusa Geitler, loc. cit. 1925. --Another slide in the British Museum (Natural History), the Type specimen of this species, also of R. H. Compton no. 1181 from New Caledonia, was likewise mounted in liquid containing glycerine. I studied it also in water drawn under the cover slip. The plant present, answering to Carter's description = Physolinum Monilia (De Wildem.) Printz, overgrown with Fungi, but otherwise as in the Type of Rosaria ramosa Cart.

Pseudodiplonemataceae Elenkin, Monogr. Alg. Cyanoph., Pars Spec. 2: 1838. 1949. --Type genus: Pseudospelaeopogon Elenkin, ibid. 2: 1839. 1949. --Type species: Spelaeopogon lucifugus Borzi in Sommier, Boll. R. Orto Bot. Palermo 6: Appendice p. 171. 1907. Pseudospelaeopogon lucifugus Elenkin, ibid. 2: 1840. 1949. --A specimen, designated here as the Type, labeled "Leptopogon lucifugus" from Palermo, A. Borzi, Oct. 1904, in the herbarium of Bornet--Thuret at the Muséum National d'Histoire Naturelle in Paris, is excellent and unmistakable material of the widely distributed and often collected stigonematacean species:

Fischerella ambigua (Näg.) Gom. Bourrelly in Les Algues d'Eau Douce 3: 378, footnote (1970) notes that he has observed heterocysts in this or similar material.

SCHIZOTHRIX ANABAENOIDES (Drouet), comb. nov. Phormidium thermale Drouet, Field Mus. Bot. Ser. 20(6): 138. 1942 (not Vouk, Jugoslav. Akad. Prirod. Istraž. Hrvatski i Slavonije, Mat.-Prirod. Razr. 8: 7. 1916). P. anabaenoides Drouet, Madroño 16(3): 108. 1961. --The new combination here is made to supplant the name Schizothrix monticulosa (Bory) Dr. for the species treated on pages 140--142 of my "Revision of the classification of the Oscillatoriaceae" (Monogr. Acad. Nat. Sci. Philadelphia, no. 15. 1968). When I studied the Type (in the Muséum National d'Histoire Naturelle, Paris) of the basionym of the latter (Anabaena monticulosa Bory) in 1960, I was not prepared to recognize the precise distinctions among the small species of Schizothrix which revealed themselves as the revising proceeded until 1966. I re-studied the Type specimen in 1970 and discovered that the material is of S. calcicola (Ag.) Gom. with thin discrete sheaths, which give the terminal cells acutely conical configurations through optical illusion.

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